



# भारत का राजपत्र The Gazette of India

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No. 23]

NEW DELHI, SATURDAY, JUNE 9, 2001 (JYAISTHA 19, 1923)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

## भाग III—खण्ड 2

### [PART III—SECTION 2]

[पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस]  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

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Calcutta, the 9th June 2001

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पेटेंट कार्यालय  
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कलकत्ता, दिनांक 9 जून 2001

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ते में अवस्थित है तथा मुम्बई, दिल्ली एवं चेन्नई में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप से प्रदर्शित हैं :-

पेटेंट कार्यालय शाखा, टोडी इस्टेट,  
तीसरा तल, लोअर फोरल (प),  
मुम्बई - 400 013।

गुजरात, महाराष्ट्र तथा मध्य प्रदेश  
तथा गोआ राज्य क्षेत्र एवं संघ  
शासित क्षेत्र, दमन तथा दीव एवं  
दादर और नगर हवेली।

तार पता - "पेटेफिस"  
फोन - 482 5092  
फैक्स - 022 4950 622

पेटेंट कार्यालय शाखा,  
एकक सं. 401 से 405, 3रा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली - 110 005।

हरियाणा, हिमाचल प्रदेश, जम्मू  
तथा कश्मीर, पंजाब, राजस्थान,  
उत्तर प्रदेश तथा दिल्ली राज्य  
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तार पता - "पेटेंटोफिक"  
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पेटेंट कार्यालय शाखा,  
विंग "सी" (सी-4, ए),  
तीसरा तल, राजाजी भवन,  
बसंत नगर, चेन्नई - 600 090।

आन्ध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु  
तथा पाण्डिचेरी राज्य क्षेत्र एवं संघ  
शासित क्षेत्र, लक्षद्वीप, मिनिक्काय तथा  
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पेटेंट कार्यालय (प्रधान कार्यालय),  
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भवन 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस मार्ग,  
कलकत्ता - 700 020।

भारत का अवशेष क्षेत्र

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पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 1999 अथवा पेटेंट (संशोधन) नियम, 1972 द्वारा अपेक्षित सभी आवेदन सूचनाएं, विवरण या अन्य दस्तावेज या कोई फीस पेटेंट कार्यालय के केवल समुचित कार्यालय में ही ग्रहण किए जाएंगे।

शुल्क : शुल्कों की अदायगी या तो नकद की जाएगी अथवा जहाँ उपयुक्त कार्यालय अवस्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा चेक द्वारा की जा सकती है।

## ALTERATION OF DATE

186031 filed on 17-01-92

037/Del/92 Anti date to 03-11-88

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## स्वीकृत संपूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि संबद्ध आवेदनों में से किसी पर पेटेंट अनुदान के विरोध करने के इच्छुक व्यक्ति, इसके निर्गम की तिथि से चार (4) महीने या अग्रिम ऐसी अवधि जो उक्त चार (4) महीने की अवधि की समाप्ति के पूर्व, पेटेंट (संशोधन) नियम, 1999 के तहत विहित प्ररूप 4 पर अगर आवेदित हो, एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक एक्स को उपयुक्त कार्यालय में ऐसे विरोध की सूचना विहित प्ररूप 7 पर दे सकते हैं। विरोध संबंधी लिखित वक्तव्य दो प्रतियों में साक्ष्य के साथ, यदि कोई हो, उक्त सूचना के साथ या पेटेंट (संशोधन) नियम, 1999 द्वारा संशोधित नियम 36 के तहत यथाविहित उक्त सूचना के तिथि से 60 दिन के भीतर फाईल कर दिये जाने चाहिए।

प्रत्येक विनिर्देश के संदर्भ में नीचे दिये वर्गीकरण, भारतीय वर्गीकरण तथा अन्तर्राष्ट्रीय वर्गीकरण के अनुरूप हैं।

विनिर्देश तथा चित्र आरेख, यदि कोई हो, की अंकित प्रतियों की आपूर्ति पेटेंट कार्यालय या उसके शाखा कार्यालयों से यथाविहित 30/- रुपये प्रति की अदायगी पर की जा सकती है।

ऐसी परिस्थिति में जब विनिर्देश की अंकित प्रति उपलब्ध नहीं हो, विनिर्देश तथा चित्र आरेख, यदि कोई हो, की फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय या उसके शाखा कार्यालयों से यथाविहित फोटोप्रति शुल्क उक्त दस्तावेज के 10 रुपये प्रति पृष्ठ धन 30/- रुपये की अदायगी पर की जा सकती है।

Ind Cl 85J

186021

Int Cl<sup>4</sup> B01D, 53/00, 53/34

## "A DEVICE FOR TREATING FLUE GASES CONTAINING GASFOUS POLLUTANTS"

Applicant STEIN INDUSTRIE, 19-21, AVENUE MORANE SAULNIER, 78140, VELIZY VILLACOUBLAY, FRANCE

Inventor(s) CORINNE BEAL—FRANCE, JEAN-MICHEL LEMASLE—FRANCE, JEAN-XAVIER MORIN—FRANCE, MICHEL VANDYCKE—FRANCE

Application for Patent No. 0006/Del/93 filed on 04.01.93

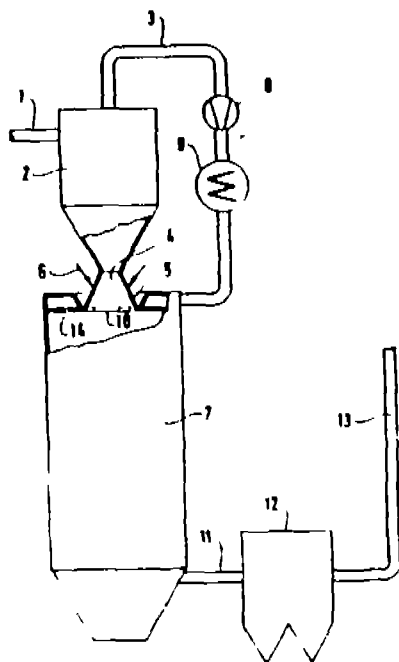
Appropriate Office for Opposition Proceedings (Rule 4 Patents Rules 1972) Patent Office Branch, New Delhi 5

(2 Claims)

A device for treating flue gases containing gaseous pollutants and a basic inorganic material in powder form injected into said gases in order to reduce their content of pollutants, the device being characterized in that it comprises

- (a) a cyclone (2) for separating the gases into a fraction with increased particle content that is removed via a bottom outlet (4) of the cyclone, and a fraction with reduced particle content that is removed via the top of the cyclone (2),
- (b) a divergent cone (5) connected to the bottom outlet (4) of the cyclone (2) and provided with water injection means (6),
- (c) a vertical reactor (7) provided at its top with a central orifice (10) connected to the outlet from the cone (5),
- (d) ducting (3) connecting the top outlet from the cyclone (2) to a peripheral injector (14) disposed at the top of the reactor (7) around the central orifice (10),
- (e) a fan (8) and cooling means (9) disposed on said ducting (3) and

- (f) and outlet duct (11) disposed at the bottom of the reactor (7) to remove the gases to a dust separator (12)



Complete Specification 6 Pages Drawing Sheet 1)

Ind Cl 32F(2a) 186022

Int Cl<sup>4</sup> C07B 37/12

"AN IMPROVED PROCESS FOR THE PRODUCTION OF DIELS-ALDER MONO-ADDUCTS OF 4-VINYLCYCLOHEXENE AND CYCLOPENTADIENE"

Applicant SHELL OIL COMPANY, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 900 LOUISIANA STREET, HOUSTON, TEXAS 77002, UNITED STATES OF AMERICA

Inventor ROBERT HARDY ELLISON—U S A

Application for Patent No 0010/Del/93 filed on 05 01 92

Appropriate Office for Opposition Proceedings (Rule 4, Patents Act 1972) Patent Office Branch, New Delhi-110 005

(8 Claims)

An improved process for the production of Diels-Alder mono-adducts of 4-vinylcyclohexene and cyclopentadiene comprising the steps of

- (a) reacting 4-vinylcyclohexene and cyclopentadiene to produce a Diels-Alder adduct comprising the 1:1 molar adduct of 4-vinylcyclohexene and

cyclopentadiene higher adducts of 4-vinylcyclohexene and cyclopentadiene oligomers

- (b) separating in a conventional manner the resulting Diels-Alder adduct into a light product comprising primarily said 1:1 molar adduct and a heavy product comprising said higher adducts and cyclopentadiene oligomers,
- (c) reacting at least a portion of the heavy product from step (b) with 4-vinylcyclohexene thereby to produce further 1:1 molar adduct of 4-vinylcyclohexene and cyclopentadiene and
- (d) recovering said further 1:1 molar adduct

(Complete Specification 15 Pages Drawing Sheet-Nil)

Ind Cl 125B<sub>2</sub>

186023

Int Cl<sup>4</sup> C04B—35/52

"AN IMPROVED ELECTRODE FOR SENSING HYDROGEN ION CONCENTRATION IN A SOLUTION"

Applicant COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA (AN INDIAN REGISTERED BODY, INCORPORATED UNDER REGISTRATION OF SOCIETIES ACT, ACT XXI OF 1860)

Inventor(s) GOLLAKOTA PRABHAKARA RAO—INDIA, GOMATHI HARIHARASUBRAMANIAN—INDIA AND SESHADRI VIJAYALATHA—INDIA

Application for Patent No 69/Del/93 filed on 28th Jan 93

Complete left after Provisional Specification filed on 13 04 94

Appropriate Office for Opposition Proceedings (Rule 4 Patents Rules 1972) Patent Office Branch, New Delhi-110005

(2 Claims)

An improved electrode for sensing hydrogen ion concentration in a solution, which comprises a capillary tube of 2-3mm diameter and comprising of glass or PVC or teflon (1) the top end of the capillary being concentrically fitted to sleeve (2) having a concentric screw thread mechanism through it, the sleeve having a threaded rod (4) capable of moving concentrically up & down through the said capillary tube (1) the capillary tube is filled at the bottom with a hydrogen ion exchanger composition (5) in

the form of a paste and comprising a mixture of (i) 0.005—0.01g either hydroquinone or quinone or quinhydrone, (ii) 1.0—2.5g graphite powder and (iii) 0.2—0.5ml mediator selected from tri-n-butyl phosphate, dioctylphthalate, nitrotoluene or crecylphosphate, the top of the threaded rod with a screw head establishes electrical contact with the said ion exchanger composition.

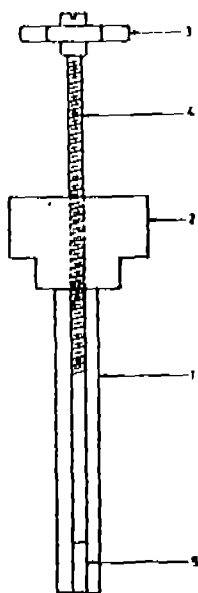


FIG. 1

(Provisional Specification : 06 Pages Drawing Sheet-Nil)

(Complete Specification : 09 Pages Drawing Sheet-1)

Ind. Cl. : 14A<sub>2</sub> 186024

Int. Cl.<sup>4</sup> : H01M—10/02

“AN IMPROVED PROCESS FOR THE PREPARATION OF A SEMICONDUCTOR OXIDE POWDER USEFUL FOR THE PREPARATION OF NEGATIVE ACTIVE ELECTRODES.”

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH RAJ MARG, NEW DELHI-110001, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860)

Inventor(s) MUTHIRULANDI JAYACHANDRAN—INDIA, MARY JULIANA CHOCKALINGAM—INDIA & ALUR SUNDARAM LAKSHMANAN INDIA

Application for Patent No. 70/Del/93 filed on 28th Jan. 93.

Complete left after Provisional Specification filed on 31st March, 93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005

(6 Claims)

An improved process for the preparation of a semiconductor oxide powder which comprises,

(a) reacting aqueous alkaline solution of a cadmium and a tin salt at a pH 9-12 keeping the bath temperature between 50 and 80°C for 1-2 hrs. to produce cadmium hydroxy stannate precipitate,

(b) Washing the said precipitate thoroughly with triple distilled water and drying at 80-90°C for 12-24 hours.

(c) grinding the cadmium hydroxy stannate powder thus produced to particle size of 2-5 micrometers,

(d) calcining the above said cadmium hydroxy stannate ground powder at 400-700°C for 2-6 hours,

(e) cooling to room temperature

(f) annealing in air at 800-1000°C for 1-2 hours to obtain a semiconductor oxide powder.

(Provisional Specification : 14 Pages Drawing Sheet-Nil)

(Complete Specification : 10 Pages Drawing Sheet-Nil)

Ind Cl 160D

186025

Int Cl<sup>4</sup> F16F 9/00

“AN APPARATUS FOR DAMPING VIBRATIONS OF COMPONENTS SUCH AS PIPE CONDUIT OR INSTALLATIONS IN A FILLED FUEL TANKS OF VEHICLES”

Applicant : ERNO RAUMFAHRTTECHNIK GMBH., A COMPANY ORGANISED UNDER THE LAWS OF THE STATE OF GERMANY, OF HUNEFELDSTRASSE 1-5 D-2800 BREMEN 1, GERMANY

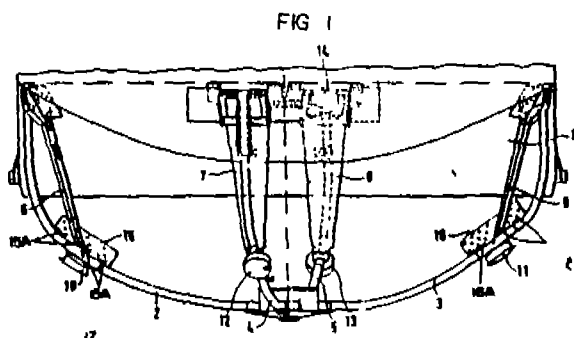
Inventor(s) : ERNST HORNUNG—GERMANY, HUBA WOLFGANG OERY—GERMANY AND HERBERT WENZ—GERMANY.

Application for Patent No. 091/Del/93 filed on 03rd Feb. 93

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005

(8 Claims)

An apparatus for damping vibrations of components such as pipe conduit or installations in a filled fuel tanks of vehicles, including land vehicles, aircraft, and spacecraft, said apparatus comprising at least one damping body, characterized in that the said damping body is rigidly secured to such component by securing means and has through-holes for access of liquid into said through-holes



(Complete Specification · 08 Pages Drawing Sheet 1)

Ind Cl . 25BD

186026

Int Cl<sup>4</sup> B28B 3/00

"A MULTIMOULD PRESS FOR PRODUCING EARTH BLOCKS"

Applicant SERGE MAINI, AN INDIAN NATIONAL OF HOUSE NO 25, TILAK KHAND, GIRI NAGAR, KALKAJI, NEW DELHI-110019—INDIA

Inventor . SERGE MAINI—INDIA

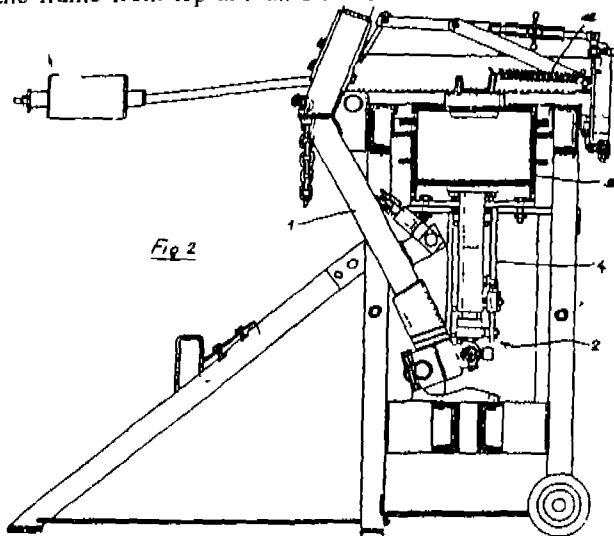
Application for Patent No 95/Del/93 filed on 04th Feb, 93

Complete left after Provisional Specification filed on 04 05 94

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005

(8 Claims)

A multimould press for producing earth blocks comprising a hand lever to be connected with the piston means provided with the frame of the press through the roller assembly such that to press the mud filled in the mould, said mould being secured at the top portion of the frame, lock means being secured with said lever pivotally so as to lock the lid upon pressing the hand lever downwardly, top and side protections are provided to cover the frame from top and all sides of the frame



(Provisional Specification 05 Pages Drawing Sheet-Nil)  
(Complete Specification 11 Pages Drawing Sheets 8)

Ind Cl 157D<sub>1</sub>, 6(a+b)

186027

Int Cl<sup>4</sup> E01D 19/12

A SLEEPER LAYING APPARATUS FOR RAILWAY TRACK

Applicant MACBON PTY LTD, AN AUSTRALIAN COMPANY, OF 16 DEBORAH AVENUE, THIRROUL, NEW SOUTH WALES 2515, AUSTRALIA

Inventor GRAEME SINCLAIR DUNNETT (AUSTRALIA)

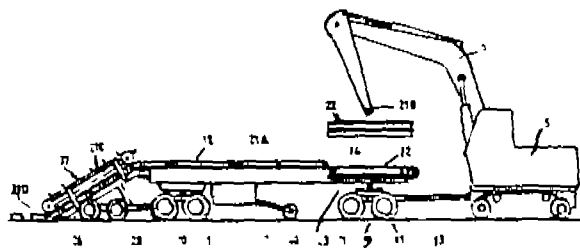
Application for Patent No 107/Del/93 filed on 9 2 93

Convention Date 22 11 92/30383/92/(Australia)

Appropriate Office for Opposition Proceedings (Rule 4 Patents Rules, 1972) Patent Office Branch, New Delhi 110005

(9 Claims)

A sleeper laying apparatus for railway track comprising a mobile chassis (7 to 12, 26 & 27) furnished with road wheels (11) permitting it to travel along a bare rail bed a storage conveyor (15 to 20) on said chassis (7 to 10 & 12) for holding a file of sleepers (21a, 21b) and for feeding those sleepers (21A, 21B), towards the rear of the chassis (7 to 10 & 12), an inclined gravity conveyor (29) at the rear of the chassis (7 to 10, 12, 26, 27) able to receive sleepers (21a) from said storage conveyor (15 to 20) and allow them to gravitate onto the track bed, a hold back escapement means (30 to 38) disposed above said gravity conveyor (29) to control the movement of sleepers (21c) thereon, and control means (39 & 40), responsive to the forward travel of the chassis (7 to 10, 12, 26 & 27) controlling the actuation of said hold back escapement means (30 to 38) whereby sleepers (21D) are discharged from said gravity conveyor (29) at predetermined intervals of chassis movement



(Complete Specification 12 Pages Drawings Sheets 4)

Ind Cl 32—3(B)

186028

Int Cl<sup>4</sup> C07C—1/00 + 15/00

AN IMPROVED PROCESS FOR THE ISOLATION OF AROMATIC HYDROCARBONS FROM MIXTURES CONTAINING AROMATIC AND NON AROMATIC HYDROCARBONS

Applicant COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001 INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860)

Inventor(s) AMAR NATH GOSWAMI—INDIA ANSHU SHARMA—INDIA, BACHAN SINGH RAWAT—INDIA, SATISH KUMAR SHARMA—INDIA AND T C S M GUPTA—INDIA

Application for Patent No 125/Del/93 filed on 15th Feb, 93

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

#### 8 Claims

An improved process for the isolation of aromatic hydrocarbons from mixtures containing aromatic and non aromatic hydrocarbons which comprises emulsifying the feed mixture in water containing water-soluble non-ionic alkyl phenol polyoxyethylene ether surfactant of the formula 1

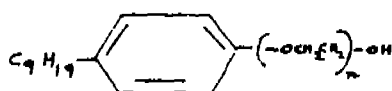
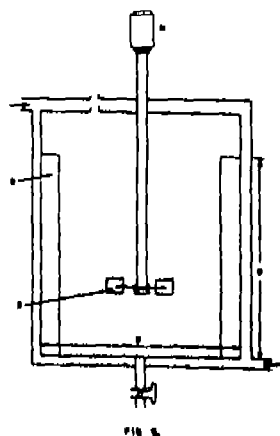


Fig 1

to given an Oil in water emulsion by conventional methods having a volume fraction of hydrocarbon in the emulsion exceeding 0.5, dispersing the Oil in water emulsion in a non aqueous external phase selected from kerosene, heptane or gas oil fraction in a continuous co current mixer column contactor of the figure 2



agitating the reaction mixture followed by continuously withdrawing the emulsion globules coalescing at the bottom of the contactor to get aromatic lean spent emulsion phase along with the above said external phase, emulsifying the external phase to recover the non-aromatic mixture and the aqueous surfactant solution the above said surfactant solution

being recycled, distilling the aromatic rich external phase to recover aromatic hydrocarbons by conventional methods and recycling the aqueous surfactant solution to emulsify fresh feed if desired

(Complete Specification 18 Pages Drawing Sheet 3)

Ind Cl 108B

186029

Int Cl<sup>4</sup> C21C 5/06 5/36

#### A PROCESS FOR THE RECOVERY OF COPPER AND FERRO NICKEL FROM THE ANODE SLAG

Applicant COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860)

Inventor(s) DAITA SREERAMA CHANDRA MURTHY—INDIA, KEDARNATH GUPTA—INDIA AND DWARKANATH DATTARAM AKERKAR—INDIA

Application for Patent No 126/Del/93 filed on 15th Feb, 93

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

#### (9 Claims)

A process for the recovery of copper and ferro nickel from the anode slag which comprises

(i) Crushing and grinding of the anode slag essentially containing oxides of copper & nickel to a particle size in the range of less than 100 mesh B S S size, and making it free from metallic inclusions by any known process such as sieving and magnetic separation,

(ii) Leaching the ground slag by conventional ammoniacal leachant,

(iii) Filtering the leached slurry to separate the leach liquor and leach residue,

(iv) Recovering the copper if desired, from the leach liquor by any known process,

(v) Drying the leach residue and heating at a temperature in the range of 400—700°C, then cooling and mixing with aluminium powder and

(vi) Reducing the mixture using conventional ignition mixture consisting of barium peroxide and aluminium powder to get the ferro-nickel

(Complete Specification 12 Pages Drawing Sheet Nil)

186030

Int. Cl.<sup>4</sup> : C21C, 5/06, 5/36.

# A PROCESS FOR THE RECOVERY OF COPPER AND FERRO NICKEL FROM THE ANODE SLAG OF COPPER PLANTS

**Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).**

**Inventor(s) : DAITA SREERAMA CHANDRA MURTHY—INDIA, KEDARNATH GUPTA—INDIA AND DWARKANATH DATTARAM AKERKAR—INDIA.**

Application for Patent No. 127/Del/93 filed on 15th Feb., 93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(12 Claims)

A process for the recovery of copper and ferro-nickel from the anode slag of copper plants wich comprises :

(i) Crushing and grinding of the anode slag essentially containing oxides of copper & nickel to a particle size in the range of less than 100 mesh B.S.S. size, and making it free from metallic inclusions by any known process such as sieving and magnetic separation.

(ii) Leaching of the ground slag by ammoniacal ammonium carbonate leachant.

(iii) Filtering of the leached slurry to separate the leach liquor and leach residue,

(iv) Recovering the copper if desired, from the leach liquor by any known process,

(v) Drying the leach residue at a temperature in the range of 150 to 250°C.

(vi) mixing the dried residue with carbon reductant and fluxes and smelting in an electric furnace at a temperature in the range of 1500 to 1600°C to recover ferro-nickel.

(Complete Specification : 13 Pages      Drawing Sheet Nil)

186031

Int. Cl.<sup>4</sup> : G 01 C 21/00.

A LORAN-C NAVIGATION AND MESSAGE  
COMMUNICATION DEVICE.

Applicant : MEGAPULSE INCORPORATED, A CORPORATION DULY ORGANIZED UNDER THE LAWS OF DELAWARE AT 8 PRESTON COURT, BEDFORD, MASSACHUSETTS, UNITED STATES OF AMERICA.

**Inventor(s) : PER ENGE—U.S.A.**

Application for Patent No. 037/Del/92 filed on 17 01 92

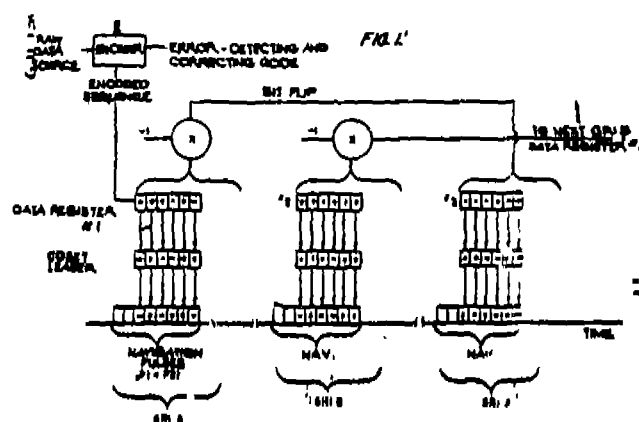
Divisional out of Patent Application No. 949/Del/88 filed on 03.11.88.

Anti dated to 03 11.88.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(5 Claims)

A Loran-C navigation and message communication device comprising means for receiving the pulses for Loran-C simultaneously with the asymmetric pulse position modulated communication data, processing means to process in a predetermined zero crossing times to provide navigation position means for separately processing the modulated pulses and for removing the coset leader logical multiplication therefrom and demodulating and decoding means for demodulating and decoding the data to recover the original message.



(Complete Specification : 27 pages      Drawing Sheets 7)

186032

Int. Cl. : D 21 B 1/00.

**"A PROCESS FOR THE RECOVERY OF CHEMICALS  
FROM THE BLACK LIQUOR".**

Applicant : GIAN PARKASH BHAMBRI, AN INDIAN  
NATIONAL OF 116, SAI KIRPA, NEW OFFICERS  
COLONY, PATIALA-147001, INDIA.

**Inventor(s) : GIAN PARKASH BHAMBRI—INDIA.**

Application for Patent No. 277/Del/92 filed on 30.3.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(5 Claims)

A process to recover the unused chemicals used for digesting of the agrowaste from the black liquor produced



in the agro based paper mills comprising in digesting the agrowaste by indirect heating in a digestion chamber, subjecting the said digested agrowaste pulp to the step of separation for separating the pulp and black liquor the black liquor so obtained being concentrated in a free falling wash column, drying the said concentrated black liquor by boiling to obtained the slug cake, burning said slug cake in a suitable furnace so as to burn the organic matter present in the slug cake, titrating the unburnt matter with water to recover the chemicals.

(Complete Specification : 9 pages Drawing Sheet 1)

Ind. Cl. : 65 B<sub>2</sub>. 186033

Int. Cl.<sup>4</sup> : H01F 41/06.

#### "TRANSFORMER COIL WINDING APPARATUS".

Applicant : KITAMURA KIDEN CO., LTD., A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF JAPAN OF 3434, KOHIGASHI, CHINO-SHI, NAGANO, JAPAN.

Inventor(s) : FUMIO KITAMURA—JAPAN.

Application for Patent No. 0290/Del/92 filed on 31.03.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

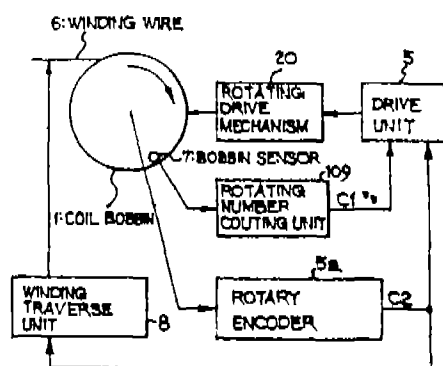
(8 Claims)

A transformer coil winding apparatus for winding a winding wire on a coil bobbin (201) comprising :

a detection unit (7) as herein described provided on said coil bobbin (201);

a rotation number counting unit (109) as herein described for counting the number of rotations of said coil bobbin (201) on the basis of the output of said detection unit (7); a rotary encoder (5a) as herein described provided on a drive shaft of a rotating drive mechanism (20); and a drive unit (5) for rotatably driving said rotating drive mechanism (20) in response to the number of rotations on said rotation number counting unit (109) and the output of said rotary encoder (5a).

FIG. 3



(Complete Specification : 29 Pages Drawing Sheet 17)

Ind. Cl. : 129Q.

186034

Int. Cl.<sup>4</sup> : B 23K 35/22.

#### "A METHOD OF JOINING A MANGANESE STEEL WORKPIECE TO AT LEAST ANOTHER WORKPIECE OF CARBON STEEL"

Applicant : MANOIR INDUSTRIES, A FRENCH BODY CORPORATE, OF 207 RUE BE BERCY, 75587 PARIS CEDEX 12, FRANCE.

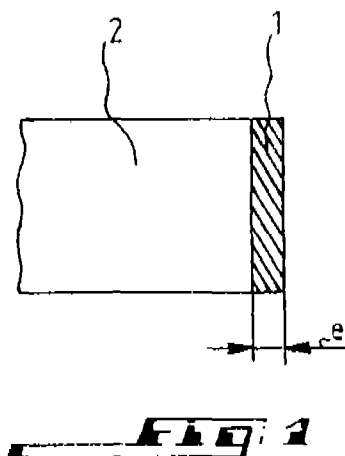
Inventors : FERNAND PONS—FRANCE, ANDRE MARC JOSEPH SPOLIDOR—FRANCE AND DANIEL LOUIS SEILLIER—FRANCE.

Application for Patent No. 306/Del/92 filed on 7 4.92

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(10 Claims)

A method of joining a workpiece of manganese steel to at least another workpiece of carbon steel, characterized in that it consists in preheating said workpiece of carbon steel to 300—600°C, depositing an austeno-ferritic stainless steel onto the end of said workpiece of carbon steel by means such as a wire by the MIG process or the TIG process or by means of electrodes, cooling said deposited workpiece of carbon steel immediately after said deposition, and welding said workpiece of carbon steel with its end comprising said deposit to said workpiece of manganese steel by any conventional welding technique.



(Complete Specification : 12 Pages Drawing Sheets 2)

Ind. Cl. : 179 B.

186035

Int. Cl.<sup>4</sup> : B 67 C, 11/00.

#### "AN IMPROVED FUNNEL".

Applicant : KANWAR GAURAV RAGHAVA, AN INDIAN NATIONAL OF 2198, TRINAGAR, DELHI-110035.

Inventor(s) . KANWAR GAURAV RAGAVA—INDIA

Application for Patent No 0572/Del/92 filed on 30 06 92

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(4 Claims)

An improved funnel for use for transferring liquid from one container to the other container comprising an upper part preferably in the form of a cone, tube constituting the lower portion of said funnel being secured to the lower end of said upper parts of the funnel at the inner surface thereof, characterized in that an outer tube having perforations/holes near the upper end thereof, being provided around said tube and is secured to the lower end of said upper part at the outer surface thereof such that the perforated portion remains out of the neck/mouth of the container

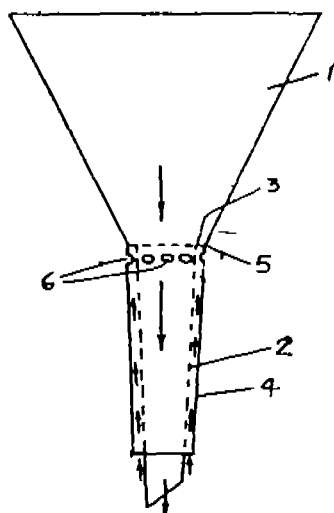


Fig. 1

(Complete Specification 7 Pages Drawing Sheet 1)

Ind Cl 32F<sub>2</sub> C, 32F<sub>3</sub> Q.

186036

Int Cl<sup>4</sup> · C 07H 5/06

# A PROCESS FOR PREPARING N-ALKYLAMINO POLYOLS

Applicant THE PROCTER & GAMBLE COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF OHIO UNITED STATES OF AMERICA, OF ONE PROCTER & GAMBLE PLAZA, CINCINNATI, STATE OF OHIO 45202, UNITED STATES OF AMERICA

Inventor(s) · JEFFREY JOHN SCHEIBEL—U S, KEVIN LEE GARBER—U.S., SCOTT ALAN VANDIEST—U S, ROBERT EDWARD SHUMATE—U S, CYNTHIA MARIE STARK—U S, ROLAND GEORGE SEVERSON—U S AND JUNAN KAO—U S

Application for Patent No 675/Del/92 filed on 29 7 92

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005

(7 Claims)

A process for preparing N-alkylamino polyols, preferably N-alkyl glucamine, N alkyl fructamine, N-alkyl maltamine, and/or N-alkyl glycerol amine, by reacting an N alkylamine with a reducing sugar and hydrogen sequentially simultaneously in the presence of a catalyst as herein described carried out under non-oxidizing conditions the said sequential process comprising

preparing an adduct of a reducing sugar preferably glucose, fructose, maltose, xylose, and/or glyceraldehyde, and a primary amine, comprising reacting a solution of said sugar, having a Gardner color of less than 1 and being essentially free of oxygen, with said amine, which is also essentially free of oxygen, at a temperature that is less than 70°C, the molar ratio of said amine to said sugar being less than 30 1, and the time of the reaction being shortenough to give a Gardner Color of less than 7 and long enough to give yield of adduct based on said sugar of at least 90%,

reacting the said adduct being free from unreacted sugar starting material and after dissolving/suspending said adduct in aqueous and/or organic hydroxy solvent, with hydrogen in the presence of hydrogenation catalyst, in two stages, the first stage being at a temperature that is sufficiently low to avoid said adducts degradation and/or excessive formation of the hydrogenated material corresponding to said reducing sugar, preferably below of from 70°C, and a hydrogen pressure of more than 100 psi to convert at least 80% of said adduct to the corresponding amine and the second stage being at a temperature sufficiently high to minimise any remaining adduct and any color material precursors, preferably more than 75°C, to convert any remaining adduct and destroy any color material precursors, and removing the said catalyst at simultaneously adding the said reducing sugar to a mixture of a nickel catalyst and said N-alkylamine containing substantially no oxides of nickel while

admixing the nickel catalyst with said N-alkylamine, preferably N-methylamine, to provide mixture (a) under H<sub>2</sub> pressure prior to admixture with the sugar

admixing the said sugar with mixture (a) under hydrogen pressure,

conducting the reaction of said sugar with the said N-alkylamine/nickel catalyst mixture (a) at a temperature below 80°C, and under hydrogen pressure until at least 95% of reducible compounds are no longer present in the reaction mixture,

continuing the reaction optionally at a temperature of up to 120°C, and preferably above 80°C, until at least 99 9% of the reducible compounds are no longer present in the reaction mixture, and

recovering the N-alkylamino polyol;

the said catalyst optionally being nickel, and said nickel catalyst preferably being in the range of from 5% to 30% by weight of the sugar reactant, and optionally being washed with solvent and preferably treated with hydrogen to substantially remove all, when present, of oxides of nickel; organic materials; excess caustic; and/or alumina fines; said nickel catalyst optionally being maintained under conditions of temperature and hydrogen pressure when in contact with either said adduct and/or said N-alkylamino polyol to minimise solubilization of said nickel; also, optionally, after said processes are substantially complete, maintaining the temperature at 20°C to 135°C, and the hydrogen pressure higher than 100 psig to deposit solubilized nickel and regenerate said nickel catalyst; and/or optionally separating said nickel catalyst from said N-alkylamino polyol at low temperature under non-oxidizing atmosphere.

(Complete Specification : 46 Pages Drawing Sheet-Nil).

Ind. Cl. : 172 C3.

186037

Int. Cl.<sup>4</sup> : D01B 1/14.

#### APPARATUS FOR ALIGNING STRAW STEMS.

Applicant : THE MINISTER OF AGRICULTURE, FISHERIES AND FOOD IN HER BRITANNIC MAJESTY'S GOVERNMENT OF GREAT BRITAIN AND NORTHERN IRELAND, A BRITISH CORPORATION SOLE, OF WHITEHALL PLACE, LONDON SW1A 2HH, ENGLAND.

Inventor : GRAHAM JAMES ALDRIDGE. (ENGLAND).

Application for Patent No. 794/Del/92 filed on 4.9.92.

Convention Date 5th September, 91/9118933.2/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-5.

(4 Claims)

An apparatus for aligning straw stems, the alignment apparatus having :

a bed plate :

a plurality of fingers as herein described extending outwardly from the bed plate; and

a driving apparatus

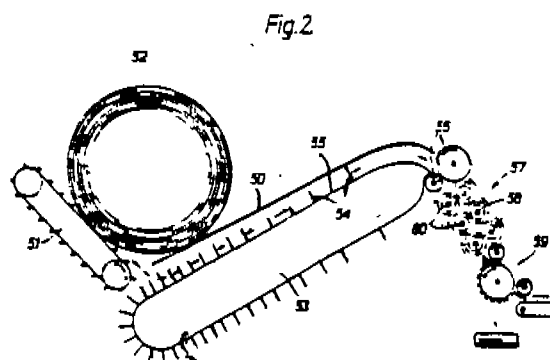
characterized in that :

the plurality of fingers are mounted so as to be drivable around an endless track in a casing;

in that the driving apparatus has a plurality of pulley mechanisms within the casing extending sequentially along the length of the track, the adjacent pulley mechanisms overlapping in side by side relationship, each said pulley mechanism having a pulley on which is

mounted a plurality of fingers driver plates each adapted to contact drive faces attached to the fingers and extending within the casing;

and in that the alignment apparatus is provided with drive means connected to the pulley mechanisms, successive pulley mechanisms being drivable by the drive means at sequentially increased speeds such that the fingers are drivable along the length of the bed plate at an accelerating speed.



(Complete Specification: 13 Pages Drawing Sheets : 5)

Ind. Cl. : 145D.

186038

Int. Cl.<sup>4</sup> : D21 1/12.

#### AN APPARATUS FOR SECURING A FABRIC OR FELTS ONTO A PAPER MAKING MACHINE

Applicant : R&D CENTRE OF PORRITTS & SPENCER (ASIA) LTD., AN INDIAN COMPANY, OF 113/114A, SECTOR-24, FARIDABAD-121005.

Inventor : KMALESH CHANDRA TAPADAR—INDIA.

Application for Patent No. 812/Del/92 filed on 10th Sept., 92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(7 Claims)

An apparatus for securing a fabric or felt onto a paper making machine comprising a gripper releasably engageable with an edge of the fabric having a handle integral with the gripper body, an attachment means movable into progressive engagement with the felt or fabric on movement of the said gripper body outwardly with respect to the said fabric edge; said attachment means comprising a roller, an inclined

surface along with which the said roller moves and a carriage movable within the said gripper body locating the said roller and having a manually engageable portion thereof extending outwardly of the said gripper body.

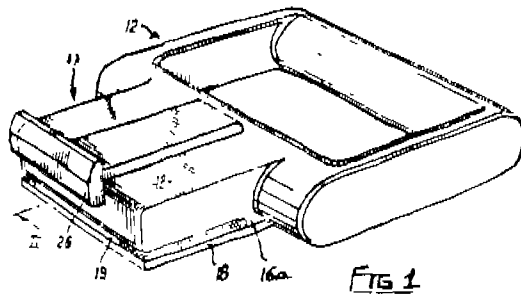


FIG. 1

(Complete Specification : 7 Pages Drawing Sheets 2)

Ind. Cl. : 136F.

186039

Int. Cl.<sup>4</sup> : B29C 45/26.

#### A METAL MOLD DEVICE FOR MOULDING A SUBSTRATE.

Applicant : SONY CORPORATION, A JAPANESE COMPANY, OF 7-35, KITASHINAGAWA 6-CHOME, SHINAGAWA-KU, TOKYO, JAPAN.

Inventors : JUNICHIRO KUDO—JAPAN AND JUN SHIMIZU—JAPAN.

Application for Patent No. 903/Del/92 filed on 09th Oct., 92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(5 Claims)

A metal mold device for molding a substrate comprising:  
a first metal mold, (141, 221),

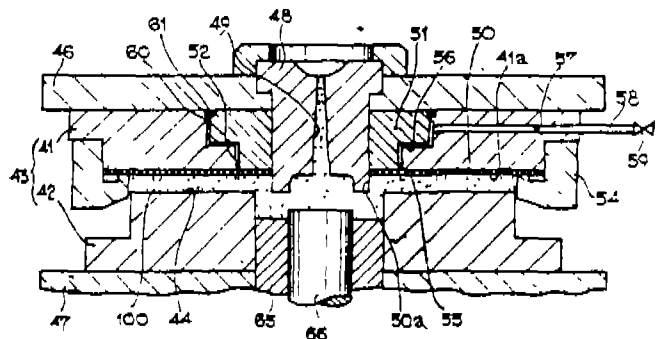
a second metal mold (142, 222) mounted facing said first metal mold, (141, 221) one of the first metal mold (141, 221) and the second metal mold (142, 222) being movable toward and away from the other of said first metal mold (141, 221) and said second metal mold, (142, 222) the second metal mold (142, 222) defining a mold cavity (144, 223) between it and said first metal mold (141, 221),

a stamper (150, 226) mounted on said first metal mold (141, 221) and located within said mold cavity, (144, 223).

a sprue bushing (148, 224) having a resin injection port (149, 225) for guiding the molten resin therethrough, said sprue bushing (148, 224) being mounted on said first metal mold (141, 221) for facing said injection port (149, 225) within said mold cavity (144, 223) via a mid part of said first metal mold, (141, 221) said sprue bushing (148, 224) being engaged with the central aperture (150a) in said stamper for positioning said stamper, (150, 226).

holding means (151, 227, 228) for holding an outer rim of the stamper (150, 226) with respect to the first metal mold, (141, 221) and stamper attraction means (155, 159, 168) mounted in the metal on which said sprue bushing is mounted for holding said stamper by attraction.

FIG. 7



(Complete Specification : 42 Pages Drawing Sheets : 12).

Ind. Cl. : 146.

186040

Int. Cl.<sup>4</sup> : G02B 6/30.

#### A METHOD OF MANUFACTURING INTEGRATED OPTICAL DEVICES.

Applicant : CORNING INCORPORATED, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, U.S.A OF HOUGHTON PARK, CORNING, NEW YORK 14831, U S A.

Inventors : THIERRY LUC ALAIN DANNOUNX-FRANCE, PATRICK JEAN PIERRE HERVE—FRANCE.

Application for Patent No. 1006/Del/92 filed on 04 11.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(10 Claims)

A method of manufacturing integrated optical devices having optical fiber pigtailed attached to optical output ports said method comprising :—

(a) forming a multiple unit structure comprising a plurality of optical device components, each of said optical device components having at least one optical output port,

(b) attaching at least one optical fiber pigtail in optical communication with at least one optical output port on each of a plurality of said optical device components, while said optical device components are integrally connected, and

(c) separating said multiple unit structure into a plurality of individual optical device components said individual optical device components having attached optical fiber pigtail.

(Complete Specification : 22 pages Drawing Sheets : 6)

Ind. Cl. : 35 B.

186041

Int. Cl.<sup>4</sup> : C04B 7/02.**AN IMPROVED PROCESS FOR MAKING ORDINARY PORTLAND CEMENT FROM RICE HUSK.**

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT, INDIA.

Inventors : PRANAB BARKAKATI—INDIA, DIPAK BORDOLOI—INDIA, AJIT CHANDRA BARUAH—INDIA, UMESH CHANDRA BORAH—INDIA & PRAKASH CHANDRA BORTHAKUR—INDIA.

Application for Patent No. 0994/Del/92 filed on 02.11. 92.

Complete left after provisional filed on 03-03-93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(7 claims)

An improved process for making ordinary portland cement from rice husk, which comprises pulverizing/grinding separately limestone, clay and coke/coal to a fineness in the range of 80—100 micron size, grinding rice husk to a fineness in the range of 150—180 micron size, mixing thoroughly 68.0 to 71.0 wt% of the ground limestone, 4.0 to 7.0 wt% of the ground clay, 2.0 to 7.0 wt% of ground coal/coke and 18.0 to 24.0 wt% the ground rice husk, spraying 10 to 12% water to pelletise/nodulise the resultant mixture by known methods, firing the pellets/nodules at a temperature in the range of 1300 to 1400 deg.C under air blast, cooling the resultant clinkers to ambient temperature, grinding the clinkers with 4 to 5 wt% gypsum to a fineness in the range of 3100 to 3600 sq.cm/g Blaines surface area to obtain the portland cement.

(Provisional Specification : 9 Pages Drawing Sheet : Nil)

(Complete Specification : 11 Pages Drawing Sheet : Nil)

Ind. Cl. : 129J.

186042

Int. Cl.<sup>4</sup> : B/21D 53/16.**A LAYING HEAD FOR FORMING AN AXIALLY MOVING ELONGATED PRODUCT INTO A SERIES OF RINGS.**

Applicant : MORGAN CONSTRUCTION COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF MASSACHUSETTS, UNITED STATES OF AMERICA, OF 15 BELMONT STREET, WORCESTER, MASSACHUSETTS 01605, UNITED STATES OF AMERICA.

Inventors : TERENCE M. SHORE—U.S.A. AND HAROLD E. WOODROW—U.S.A.

Application for Patent No. 1225/Del/92 filed on 22nd Dec., 92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(14 Claims)

A laying head for forming an axially moving elongated product into a series of rings, said laying head comprising :

an elongated tubular support; (36)

means for rotating said support about its longitudinal axis;

a pipe carried by said support for rotation therewith, said pipe having an inlet end aligned with said axis and connected to receive said product, and having an intermediate portion providing a curved guide path leading from said inlet end to an outlet end connected to rotate about said axis and from which said product is discharged in the form of a continuous series of rings; and

guide means communicating with said outlet end for providing a helical extension of said guide path.

characterized in that the said guide means comprises a radially outwardly facing trough detachably connected to said support for rotation therewith, and a cylindrical shroud (54) surrounding and cooperating with said trough to provide a radially and axially confined helical extension of said guide path.

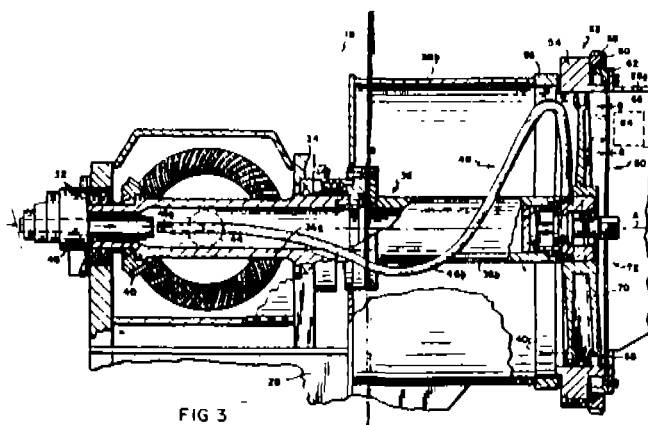


FIG 3

(Complete Specification : 14 Pages Drawing Sheets : 2)

Ind. Cl. : 39 (O).

186043

Int. Cl.<sup>4</sup> : C 01B—33/32.**A PROCESS FOR THE PREPARATION OF NOVEL CRYSTALLINE GALLIUM SILICATE.**

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-

110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT.

Inventors : NALINI EDGAR JACOB—INDIA, PRAPHULLA NARAHAR JOSHI—INDIA, VASUDEO PADURANG SHIRALKAR—INDIA.

Application for Patent No. 1240/Del/92 filed on 23.12.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(8 Claims)

An improved process for the preparation of crystalline gallium silicate having the X-ray diffraction pattern as herein described and chemical composition in terms of mole ratios of oxides in the anhydrous state by the formula  $0.5 \text{ to } 1.0 \text{ M}_2\text{O} : \text{Ga}_2\text{O}_3 : 15 \text{ to } 50 \text{ SiO}_2$ , where M is a mixture of monovalent cation selected from alkali metal, ammonium and hydrogen which comprises (i) mixing solution of a source of silicon, source of gallium and source of alkali metal with an organic compound containing quaternary nitrogen to form age (ii) autoclaving the resultant gel at a temperature in the range of 120—200°C for 3—15 days under static condition (iii) quenching the resultant crystalline material in cold water, filtering and washing with deionised water thoroughly then drying at a temperature range of 80—120°C for a period ranging from 3 to 8 hrs. & calcining in an air atmosphere in the temperature range 65—800°C for a period of 12—24 hrs. to obtain a gallium silicate having predmonently alkali metal as the monovalent cation (v) treating composite material with an aqueous solution containing ammonium ion by conventional ion-exchange process to produce a gallium silicate having predominantly ammonium as the monovalent cation and (vi) calcining at a temperature in the range of 400—500°C for a period in the range of 8—16 hrs. to obtain the crysralline gallium silicate having predominantly hydrogen as the monovalent cation.

(Complete Specification : 16 Pages Drawing Sheet : Nil)

Ind. Cl. : 132 A<sub>1</sub>B<sub>2</sub>C. 186044

Int. Cl.<sup>4</sup> : B05C 1/00.

AN IMPROVED PROCESS FOR TREATING THE SOILED FABRIC.

Applicant : WHIRLPOOL CORPORATION, 2000 M-63 BENTON HARBOR, MICHIGAN 49022, UNITED STATES OF AMERICA.

Inventors : JEANNE CLAYPOOL VAN NEUENHIZEN, MARK BRADLEY KOVICH, JIM J. PASTRYK AND ANTHONY HOMER HARDAWAY (AMERICAN).

Application for Patent No. 1265/Del/92 filed on 30.12.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(3 Claims)

An improved process for treating the soiled fabric to remove the extraneous material from the said fabrics to restore to its former condition, in wash cycle having a highly concentrated detergent solution in a vertical axis washer comprising the steps :

(i) adding water to the said wash chamber while rotating said wash chamber about its vertical axis a number of revolutions sufficient to cause said fabric, rinse water and wash chamber to rotate at approximately the same speed;

(ii) periodically decelerating said wash chamber and tumbling said fabric within said wash chamber by causing said fabric to impringe said baffle, thereby causing said fabric to tumble within said wash chamber as said chamber decelerates;

(iii) repeating steps (i) and (ii) for a first period of time of minimum 4 minutes;

(iv) directing a spray of rinse water through a spray nozzle onto said fabric during said first period of time as said fabric is rotating with and tumbling in said wash chamber;

(v) draining said rinse water from said wash chamber;

(vi) repeating steps (i)—(v) at least two times; and

(vii) spinning and draining said wash chamber to effect removal of said rinse water from said fabric.

(Complete Specification : 28 Pages Drawing Sheets : 10)

Ind. Cl. : 158 B-1.

186045

Int. Cl.<sup>4</sup> : B 61G 11/14.

A DRAFT GEAR ASSEMBLY.

Applicant : WESTINGHOUSE AIR BRAKE COMPANY, OF AIR BRAKE AVENUE, WILMERDING, PENNSYLVANIA 15148, UNITED STATES OF AMERICA.

Inventors : HOWARD RAYMOND SOMMERFELD—U.S.A., WALTER HOWARD MERKER—U.S.A.

Application for Patent No. 419/Del/93 filed on 26.4.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(6 Claims)

A draft gear assembly (10) used to cushion buff and draft shocks encountered in railroad rolling stock during operation, said draft gear assembly comprising :

(a) a housing member (12) closed at a first end thereof and open at an opposed second end thereof, said housing

member having a rear portion (14) adjacent said closed first end and a front portion (20) adjacent said opposed second open end, said front portion (20) being in open communication with said rear portion (14);

(b) at least one compressible cushioning element (18) substantially centrally disposed within said rear portion of said housing member with a first end thereof located adjacent at least a portion of an inner surface (22) of said closed first end of said housing member, said compressible cushioning element (18) extending longitudinally from said closed first end toward said opposed second open end of said housing member (12) and thereby absorbing a first portion of energy generated during compression of said draft gear assembly (10);

(c) a seat means (24) having at least a portion of one surface (26) thereof disposed adjacent an opposed second end of said compressible cushioning element (18) to move longitudinally within said housing member for, respectively, compressing and releasing said compressible cushioning element (18) during an application;

(d) a friction cushioning means (42) positioned at least partially within said opposed second open end of said housing member (12) for absorbing a second portion of such energy generated during such compression of said draft gear assembly (10), said friction cushioning means (42) including;

(i) a predetermined plurality of friction surfaces disposed on a predetermined plurality of friction elements, and

(ii) at least one wedge member connected to a predetermined number of said plurality of friction surfaces; and

(e) at least one resilient member (90) connected to at least one of said friction elements for exerting a predetermined lateral force on said friction cushioning means.

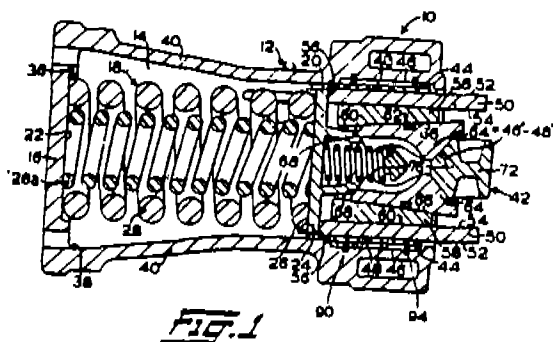


FIG. 1

(Complete Specification : 44 Pages Drawing Sheets 5)

Ind. Cl. : 201 C/D.

186046

Int. Cl.<sup>4</sup> : C 02F 1/58.

#### A WATER CLARIFIER.

Applicant : MILOS KROFTA, A U.S. CITIZEN, OF 58 YOKUN AVENUE, LENOX, MASSACHUSETTS 01240,

#### UNITED STATES OF AMERICA.

Inventor(s) : MILOS KROFTA—U.S.

Application for Patent No. 507/Del/93 filed on 18.5.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### (24 Claims)

A water clarifier comprising an inlet (48) for raw water with particulate contaminants, a floatation tank (12) where the contaminants are flocculated by a chemical agent added to the inlet water and floated to the surface of the water in the floatation tank (12) by microscopic air bubbles from a device therefor where said bubbles form a floating layer sludge, a layer of a filtration medium (56a, 56b) disposed at the bottom of the floatation tank (12) to filter the water before in flows to a clarified water outlet (66), and means (16) for removing the floated sludge from the tank (12) and directing it to a sludge outlet (20), wherein:

a plurality of vertically extending cells that divide at least the lower portion of said floatation tank (12) and the filter medium into (56a, 56b) a plurality of vertically extending cells (53, 54),

first conduit means (62) for withdrawing clarified, filtered water from said cells (53, 54),

second conduit means (64) for withdrawing first filtrate water from at least a selected one of said cells (53, 54), a backwasher (68, 74, 72, 64, 78 & 32) for the filtration medium in at least one of said cells (53, 54) and at least one valve (76) for isolating said first filtrate water from said clarified water.

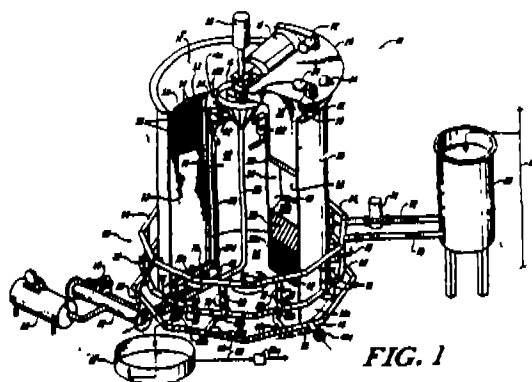


FIG. 1

(Complete specification : 34 Pages Drawing Sheets 4)

Ind. Cl. : 32 F(2a).

186047

Int. Cl.<sup>4</sup> : C07C, 149/36, 148/02.

#### A PROCESS FOR THE PREPARATION OF ETHANOL-2-(2, 4-DINITROPHENYL) SULPHIDE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA (AN INDIAN REGISTERED BODY,

INCORPORATED UNDER REGISTRATION OF SOCIETIES ACT, ACT XXI OF 1860).

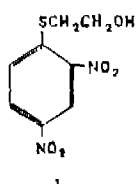
Inventor(s) : SHAIVALINI JOSHEE—INDIA, CHANDER KUMAR NARANG—INDIA AND GHAN SHYAM KHATRI—INDIA.

Application for Patent No. 642/Del/93 filed on 24th June, 93.

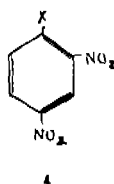
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(3 Claims)

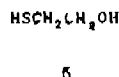
A process for the preparation Ethanol-2-(2, 4-dinitrophenyl) sulphide of the formula I



which comprises of reacting dinitrohalobenzene of the formula 4



where X represents halogen with mercaptoethanol of the formula 5



at a temperature in the range of 0—5°C in the presence of an organic solvent and an organic base such as triethyle amine and then gradually raising the temperature of the reaction mixture ranging from 10°C, to the room temperature, filtering the precipitate, washing the precipitate with organic solvent and removing the organic solvent under reduced pressure to get Ethanol-2-(2, 4-dinitrophenyl) sulphide.

(Complete Specification : 8 Pages Drawing Sheets 2)

Ind. Cl. : 32 F(2a). 186048

Int. Cl.<sup>4</sup> : C07C, 147/06, 148/02.

A PROCESS FOR THE PREPARATION OF ETHANOL-2-(2, 4-DINITROPHENYL) SULPHONE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY,

INCORPORATED UNDER REGISTRATION OF SOCIETIES ACT, (ACT XXI OF 1860).

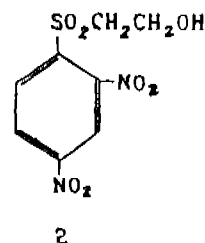
Inventor(s) : SHAIVALINI JOSHEE—INDIA, CHADER KUMAR NARANG—INDIA AND GHAN SYAM KHATRI—INDIA.

Application for Patent No. 643/Del/93 filed on 25th June, 93.

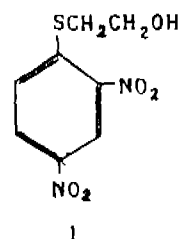
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(4 Claims)

A process for the preparation of ethanol-2-(2, 4-dinitrophenyl) sulphone of the formula 2



which comprises refluxing ethanol -2-(2, 4-dinitrophenyl) sulphide of formula I



with an oxidising agent such as herein described and removing the solvent under reduced pressure.

(Complete Specification : 8 Pages Drawing Sheets 2)

Ind. Cl. : 32 F (29).

186049

Int. Cl.<sup>4</sup> : C07C, 148102.

A PROCESS FOR THE PREPARATION OF 2-(2, 4-DINITROPHENYL) SULPHONYL) ETHYLOXY-CARBONYL CHLORIDE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA (AN INDIAN REGISTERED BODY, INCORPORATED UNDER REGISTRATION OF SOCIETIES ACT, ACT XXI OF 1860).

Inventor(s) : SHAIVALINI JOSHEE—INDIA, CHADER KUMAR NARANG—INDIA AND GHAN SYAM KHATRI—INDIA.

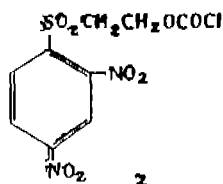
Application for Patent No. 644/Del/93 filed on 25th June, 93.

Appropriate Office for Opposition Proceedings.(Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.



## (3 Claims)

A process for the preparation of 2-[2, 4-dinitrophenylsulphonyl] ethoxycarbonyl chloride of the formula 2



of the drawing accompanying this specification which comprises reacting Ethanol-2[2, 4-dinitrophenyl] sulphone of the formula 1 with phosgene at a temperature in the range of 0 to -5°C in the presence of an organic solvent, removing the phosgene & excess of the solvent under reduced pressure after the reaction is complete to get 2-[2, 4-dinitrophenylsulphonyl] ethoxycarbonyl chloride of the formula 2.

(Complete Specification : 8 Pages Drawing Sheet 1)

Ind. Cl. : 55(D<sub>1</sub>). 186050

Int. Cl.<sup>4</sup> : A 01N 65/00.

#### A PROCESS FOR THE ISOLATION OF NATURAL NEMATICIDE FROM MORINGA SPECIES

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT.

Inventor(s) : BHAGABAT NANDA—INDIA, AMALENDU NAYAK—INDIA, NALIN BIHAREE DAS—INDIA.

Application for Patent No. 1254/Del/94 filed on 5.10.94.

Provisional Specification filed on 12.12.95.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## (4 Claims)

A process for the isolations of a natural nematocide from Moringa species which comprises extracting the precleaned roots of the Moringa Species using ethyl acetate or water as solvent by conventional methods, removing suspended impurities by known methods, then concentrating and subjecting the extract to repeated column chromatography over silica gel (60—120 mesh) using eluent petroleum ether to obtain the nematocide in pure form.

(Provisional Specification : 3 Pages Drawing Sheet : Nil).

(Complete Specification : 8 Pages Drawing Sheet : Nil).

Ind. Cl. : 200C. 186051

Int. Cl.<sup>4</sup> : F 15B — 1/00, 3/00.

#### OIL SUMP PRESSURE CONTROL DEVICE.

Applicant : CARRIER CORPORATION, A CORPORATION OF THE STATE OF DELAWARE, DOMICILED AT CARRIER PARKWAY, P. O. BOX 4800, SYRACUSE, NEW YORK, 13221, U.S.A.

Inventors : BRUCE ALAN FRASER—U.S.A., MICHAEL JAMES DÖRMER—U.S.A.

Application for Patent No. 160/Del/93 filed on 22.2.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005

## (3 Claims)

An oil sump pressure control device for a semi-hermetic (10) low side compressor comprising

— a casing (12) means defining an oil sump (14) and a suction plenum (20),

— oil (15) located in said oil sump (14),

— a restricted fluid (40-9) fluid communication path between said oil sump and said suction plenum,

— said restricted path providing the only normal fluid communication between said oil sump and the suction plenum at start up whereby pressure equalization between said oil sump and said suction plenum takes place at a controlled rate such that refrigerant in said oil sump also boils off at a controlled rate, and

— relief (40-6) means for limiting a pressure differential between said oil sump and said suction plenum

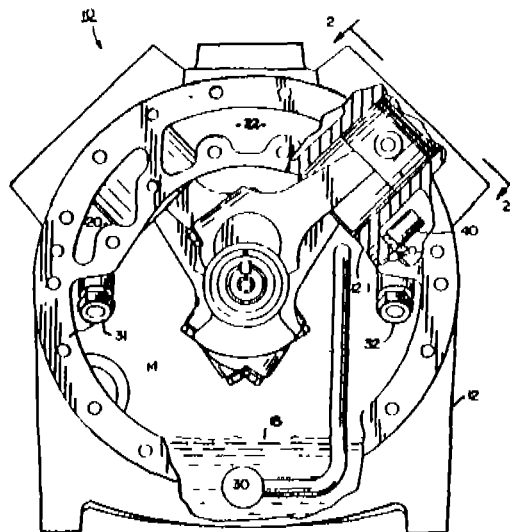


FIG. 1

(Complete Specification : 9 Pages Drawing Sheets 2)

Ind. Cl. : 206F.

186052

Int. Cl.<sup>4</sup> : H 04M 1/19, 1/70.

#### AN IMPROVED RADIO RECEIVER FOR USE IN A RADIOTELEPHONE.

Applicant : MOTOROLA INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 1303 EAST ALGONQUIN ROAD, SCHAUMBURG, ILLINOIS 60196, UNITED STATES OF AMERICA

Inventors : HENRY LUDWIG KAZECKI—U.S.A ,  
JOHN WILLIAM DIEHL—U.S.A.

Application for Patent No. 178/Del/93 filed on 26.2 93

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

(5 Claims)

An improved radio receiver for use in a radiotelephone for receiving a signal transmitted from a source 106 (301, 302), the signal having both clock information and data, the clock information and data, the clock information to be used by the receiver for detection of the data, the receiver characterized by :

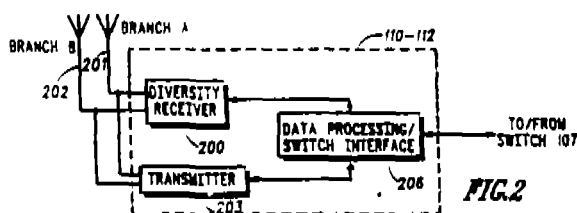
a filter (300, 310) for filtering the received signal 106 (301, 302) to produce a filtered received signal (303, 313);

a converter (305, 315) coupled to said filter (300, 310), for converting said filtered received signal (303, 313) into a plurality of samples (307, 317), wherein the plurality of samples (307, 317) includes both the clock information and data;

clock information extraction circuitry (320), coupled to said converter (305, 315), for extracting the clock information from said plurality of samples (307, 317) to produce extracted clock information,

a first data detector (323) and a second data detector (326), each said data detector coupled to said clock information extraction circuitry (320); and

a detector choice circuit (329), coupled to said first and second data detectors (323, 326), for determining a difference between said first and second detected data, and choosing said first detected data or said second detected data when said difference is less than or equal to a predetermined threshold.



(Complete Specification : 17 Pages Drawing Sheets : 5).

Ind. Cl : 193A

186053

Int. Cl<sup>4</sup> : C04B — 12/04

A PROCESS FOR THE PREPARATION OF LITHIUM STANNATE DOPED WITH TRANSITION METAL CERAMIC MATERIAL USEFUL FOR THE HUMIDITY SENSORS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-110001 INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

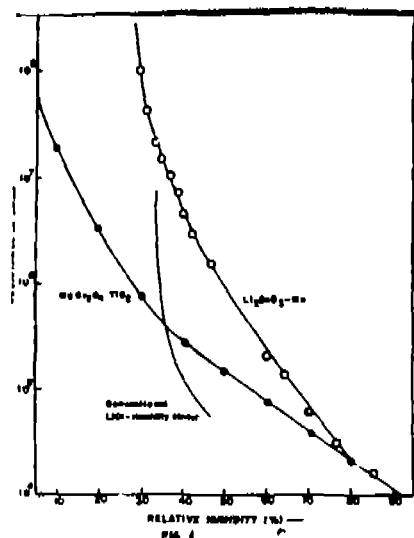
Inventors : KUNTUKRISHNA PILLAI VIJAY-MOHANAN—INDIA, IMTIAZ SIRAJUDDIN MULLA—INDIA AND PARTHASARATHY GANGULY—INDIA

Application for Patent No 191/Del/93 filed on 03rd March, 1993

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

(7 Claims)

A process for the preparation of lithium stannate doped with transition metal ceramic material useful for the humidity sensors which comprises mixing a salt of lithium with  $\text{SnO}_2$  in dry condition, thereafter mixing in wet conditions using an aliphatic organic polar solvent, blending a transition metal compound in traces with the resulting mixture, drying and compacting under pressure in the range of 5000 to 8000 lbs, to form pellets heating the pellets at a temperature in the range of 600 to 800°C for a period in the range of 6 to 12 hours followed by slow cooling to room temperature



(Complete Specification : 12 Pages Drawing Sheet 1).

Ind. Cl. : 13D

186054

Int. Cl.<sup>4</sup> : E05C 17/00.

CARRYING CASE SUCH AS A HAND LUGGAGE, BUSINESS OR ATTACHE CASE

Applicant : SAMSONITE CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 11200 EAST 45TH AVENUE, DENVER, COLORADO 80239, UNITED STATES OF AMERICA

Inventor : WILLIAM LEWIS KING—U.S.A.

Application for Patent No. 211/Del/93 filed on 04th March, 93

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005

## (4 Claims)

A carrying case such as a hand luggage, business or attache case comprising a lid shell, (11) a base shell, (14) a hinge (24) along an adjoining edge of said shells, (11, 14) and a first latch (16) attached to the case for selectively holding the lid shell (11) and base shell (14) together in a closed position to hold the case shut in a closed position, the lid shell (11) providing a lid compartment (12) and the base shell (14) providing a main compartment, (17) a divider (20) normally carried in the lid compartment, (12) the divider (20) having a panel (22) defining the front of the divider (20) and flexible gussets (23) extending between the sides of the panel (22) and the lid shell, (11) characterized by movable hooks (18, 19) pivoted to the inside of the case, members (11, 14) attached to the panel (22) which are shaped and positioned to be engaged by the hooks (18) for holding the panel (22) in alternate positions, said hooks (18) alternately and selectively holding the panel (22) in a first position within the lid shell (11) or in a second position selectively holding the panel (22) to the base shell (14).

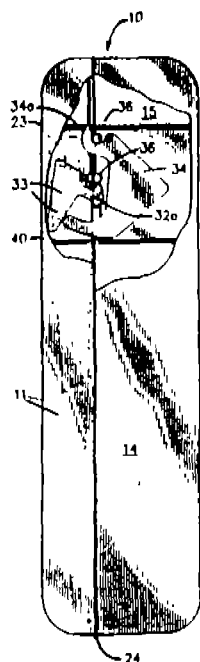


Fig. 4

(Complete Specification : 17 Pages Drawing Sheets 3).

Ind. Cl. : 23E.

186055

Int. Cl.<sup>4</sup> : B 65D 85/30.

## A CASING FOR A DISC CARTRIDGE.

Applicant : SONY CORPORATION, A JAPANESE COMPANY, OF 7-35, KITASHINAGAWA 6-CHOME, SHINAGAWA-KU, TOKYO, JAPAN.

Inventor(s) : TAKATSUGU FUNAWATARI—JAPAN, MASAIE FUKAYA—JAPAN, HIROYUKI HONMA—JAPAN, KENJI TAKAHASHI—JAPAN.

Application for Patent No. 271/Del/93 filed on 19.3.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 18 Claims

A casing for a disc cartridge comprising :

a first half having a square-shaped plate portion, a pair of sidewall sections along parallel sides of said plate portion and a rear wall section between said sidewall sections.

first engaging member on said sidewall sections, second engaging member on said rear wall section.

a second half having a square-shaped plate portion, a pair of sidewall sections along parallel sides of said plate portion and a rear wall section between said sidewall sections,

engaging means on said sidewall sections of said second half for engaging said first engaging member,

engaging means on said rear wall section of said second half for engaging said second engaging member, and

holding means for holding said disc cartridge in position within said casing.

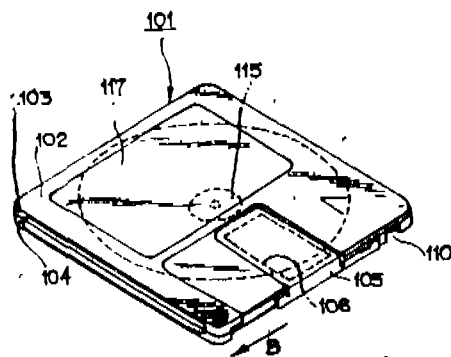


FIG. 4

(Complete Specification : 57 Pages Drawing Sheets 34).

Ind. Cl. : 206E.

186056

Int. Cl.<sup>4</sup> : H01L 23/00.

A PROCESS FOR THE PRODUCTION OF MILLIMETER WAVE TRANSIT TIME EFFECT SEMICONDUCTOR DEVICES.

Applicant : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XII OF 1860).

Inventor : SHAMIM AHMAD—INDIA.

Application for Patent No. 282/Del/93 filed on 23rd March, 93.

Complete left after Provisional Specification filed on 16.06.94.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(3 Claims)

A process for the production of millimeter wave transit time effect semiconductor devices which comprises metallizing heavily doped semiconductor substrate (1) having epitaxial layer (2) by known techniques wherein the metal used for metallization (3) consists of titanium/chromium followed by platinum and gold, forming protected circular dots of 100 micrometer diameter (6) on metallization (3), then etching the metal layers forming primary trenches to 15-20 micrometer depth (5) followed by secondary trenches leaving dot of 90 micrometer diameter (8) at the centre of the said circular dot (6) to a 10-12 micrometer depth (7) than that of the said trenches (5) by known methods, removing photoresist cleaning then depositing blanket metallization of titanium and gold by known methods, forming tertiary trenches leaving protected dot of 90 micrometer diameter (11) at the centre of the said dot (8) by known methods etching the entire semiconductor to the said depth (7) after removing the blanket and earlier metallization resulting in the formation of diode mesa surface (13) separating electroplated gold (10) by an annular ring (12), depositing SiO<sub>2</sub> by known methods to protect active surface (16) of diode mesa and thick trench bottom (14), removing SiO<sub>2</sub> layer by etching from rest of the water surface, then blanket depositing titanium and gold to protect the said mesa top (16), forming selectively plate sacrificial metal layer by conventional methods and gold beam leads around the said mesa top (16) by known methods, continue depositing sacrificial layer to about 100 micrometer thickness (21) flattening sacrificial metal surface (20) parallel to the substrate, thinning the substrate by lapping and polishing till the boundaries of first gold deposition in the trenches starts appearing, electroplating titanium and gold, then dissolving sacrificial metal layers to separate individual devices with integral beam lead configuration.

(Provisional Specification : 8 Pages Drawing Sheets 4).

(Complete Specification : 9 Pages Drawing Sheet-Nil).

Ind. Cl. : 131A<sub>2</sub>.

186057

Int. Cl.<sup>4</sup> : E21C 47/04.

**AN IMPROVED EQUIPMENT USEFUL FOR WINNING OF ORES IN LONGWALL MINING.**

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

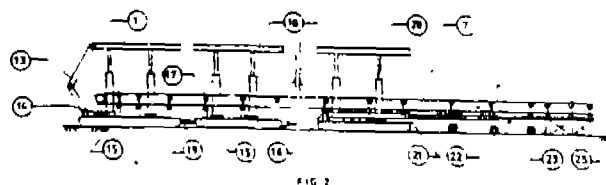
Inventor(s) : SIBNATH MAITY—INDIA AND BHARAT BHUSHAN DHAR—INDIA.

Application for Patent No. 288/Del/93 filed on 23rd March, 93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(3 Claims)

An improved equipment useful for winning of ores, in longwall mining, which comprises a hydraulic master chock shield (1) having atleast two legs at the outer edges, the said master chock shield having a cylindrical conveyor belt intake end roller (13) rotatably mounted on a stand (14) fixed to a base plate (15) of the said master chock shield, the said base plate of the said chock shield also being provided with a plurality of stands (16) having free moving conveyor belt guide rollers (17) characterised in that a plurality of known hydraulic chocks (18) having atleast four legs at its edges, being placed in front of the said master chock shield in a horizontal line, the said master chock shield and the said chocks being interlinked by means of atleast one hydraulic ram (19), the said base plates of each of the said chocks being provided with plurality of stands having free conveyor belt guide rollers, the end chock (20) also being provided with two horizontally fixed multi-telescopic booms (21) supported on free moving wheels (22), the extreme end of the said booms being fixed a fixed belt conveyor structure (23), the said conveyor structure having free moving conveyor belt guide rollers, a drive head conveyor belt roller being provided at the extreme end of the fixed structure.



(Complete Specification : 11 Pages Drawing Sheets 2).

Ind. Cl. : 102(B) & 134(B).

186058

Int. Cl.<sup>4</sup> : F15B 5/00 & B60T 13/573.

**FORCE TRANSMISSION DEVICE FOR A PNEUMATIC BRAKE BOOSTER.**

Applicant : BENDIX EUROPE SERVICES TECHNIQUES, A FRENCH COMPANY OF 126 RUE DE STALINGRAD, 93700 DRANCY, FRANCE.

Inventors : JEAN PIERRE GAUTIER, ULYSSE VERBO AND MIGUEL PEREZ REVILLA (FRANCE).

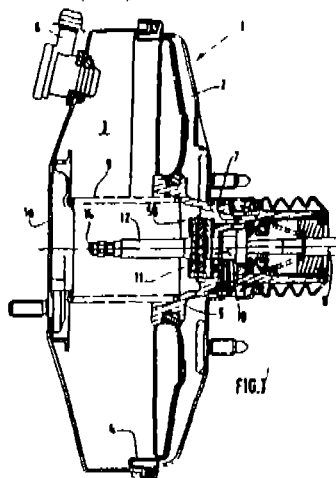
Application for Patent No. 331/Del/93 filed on 30.3.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

(5 Claims)

Force transmission device for a pneumatic brake-boosters, comprising :

- an operating rod (8) which, starting from a position of rest, capable of undergoing axial displacement through the action of an input force, said rod ending in a feeler (10) having an axial end face constituting a first upstream support surface (S1a) :
- a pneumatic piston (5) movable in an axial direction from a position of rest through the action of a pressure difference controlled by the axial displacement of the operating rod, said piston being able to receive a minimum non-zero thrust for a minimum non-zero active displacement of the operating rod and having an annular axial surface which surrounds the first upstream support surface and constitutes a second upstream support surface (S2a).
- a reaction disk (11) having an upstream face (11a) and a downstream face (11b), the upstream face being intended to receive forces applied by the first and second upstream support surfaces, and the downstream face being intended to retransmit these forces
- a thrust rod (12) having a first end (12a) fastened to a radial widening (13, 132) which offers a first downstream support surface (S1b) bearing against the downstream face of the reaction disk, this rod having a second end (12b) adapted to apply an output force greater than the input force, and
- regulation means (50, 130) for adjusting said minimum thrust to a desired final value by regulation of the distance between a support surface and the corresponding face of the reaction disk, said regulation means comprising a cup gripping the reaction disk, having a screw thread, and enabling said distance to be modified by screwing-in or screwing-out, which can be effected downstream of the reaction disk, characterized in that the distance, in the position of rest, between the first upstream support surface (S1a) and the upstream face (11) of the reaction disk is fixed by design at a value at which the minimum thrust is at most equal to its desired final value, and in that said regulation means permits the first upstream support surface (S1a) to be moved away from the first end (12a) of the thrust rod without relative displacement of the first downstream support surface (S1b) in relation to the second upstream support surface (S2a).



(Complete Specification : 12 Pages Drawing Sheets 3)

Ind. Cl. : 56B.

186059

Int. Cl.<sup>4</sup> : C01G, 51/02.

### A PROCESS FOR PRODUCING LOWER POLYMER HYDROCARBON.

Applicant : BP CHEMICALS LIMITED, A BRITISH COMPANY, BRITANNIC HOUSE, 1 FINSBURY CIRCUS, LONDON EC2M 7BA, ENGLAND, (FORMERLY OF BELGRAVE HOUSE, 76 BUCKINGHAM PALACE ROAD, LONDON SW1W 0SU, ENGLAND.

Inventor(s) : STEPHEN HARDMAN—ENGLAND, STEPHENANTHONY LENG—ENGLAND AND DAVID CHARLES WILSON—ENGLAND.

Application for Patent No. 374/Del/93 filed on 13th April, 93.

Convention Application No. 9208729.5/UK/22.04.92; 9208794.9/UK/23.4.92.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(4 Claims)

A process for producing lower hydrocarbons by cracking a polymer into vaporous products which comprise saturated and unsaturated aliphatic and aromatic hydrocarbons, and which contain less than 25wt% gases comprising C<sub>1-4</sub> hydrocarbons and no more than 10wt% aromatic hydrocarbons associated with the weight of polyolefin polymers in the feed,

said process comprising contacting said polymer with a fluidised bed at a temperature of from 300—600°C in the presence of a fluidising gas which does not oxidise the hydrocarbons produced,

wherein said vaporous products are treated so that no more than 15wt% of those vaporous products which separate as solids and/or liquids upon cooling to ambient temperature (primary products) are made up of a high molecular weight tail comprising hydrocarbons having a molecular weight of at least 700 as measured by GPC, said treatment being effected by either :

- (a) separating said high molecular weight tail and recycling it back to the fluidised bed for further cracking; and/or
- (b) operating the fluidised bed under pressure; and/or
- (c) incorporating with the fluidised bed an acidic catalyst such that the catalyst comprises less than 40wt% of the total solid components of the bed.

(Complete Specification : 16 Pages Drawing Sheet-Nil)

Ind. Cl. : 206E.

186060

Int. Cl.<sup>4</sup> : G 06F 9/00.

A FLOATING POINT PROCESSOR DEVICE FOR HIGH SPEED FLOATING POINT ARITHMETIC OPERATIONS.

Applicant : THE CHIEF CONTROLLER RESEARCH & DEVELOPMENT, MINISTRY OF DEFENCE, GOVERNMENT OF INDIA, TECHNICAL COORDINATION DTE, B-341, SENA BHAWAN, DHQ PO, NEW DELHI-110011, NEW DELHI (INDIA).

Inventor(s) : KAMBHAM SANTEPPA—INDIA, KRISHNAN NEELAKANTAN—INDIA, KESAVARAMAN USHA—INDIA, GULLAPALLI VIJAYA DURGA—INDIA.

Application for Patent No. 396/Del/93 filed on 20.4.93.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

(10 Claims)

A floating point processor device for high speed floating point arithmetic operations and adapted to be connected to memory and peripherals comprising :

- (a) a bus interface unit (BIU) adapted to be connected to central processing microprocessor through a single bus;
- (b) a controller unit (CN) connected to the output terminals of said bus interface unit (BIU);
- (c) an execution unit connected to said bus interface unit and controller unit (CN) for carrying out the operation on the operands received from said bus interface unit,
- (d) said bus interface unit having
  - (i) data latches (DL) for storage and transferring the operands from the central processing, microprocessor to a register file,
  - (ii) address decoder (AD) adapted to receive the identification address from said central processing unit and connected to said data latches (DL), and
  - (iii) address latch (AL) for storage and transferring the instructions from the central processing unit to the register file and said controller.

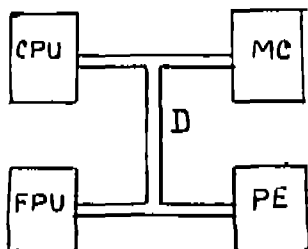


Fig. 1

(Complete Specification : 15 Pages Drawing Sheet : 1)

## RESTORATION PROCEEDINGS

Notice is hereby given that application for restoration of Patent No. 179460 dated 07-02-2001 made by M/s. SNAM ALLOYS PVT. LTD. on 25-09-2000 has been allowed and said Patent Restored.

## RESTORATION PROCEEDINGS

Notice is hereby given that application for restoration of Patent No. 182555 dated 06-03-1996 made by INTERNEURON PHARMACEUTICALS, INC. on 17-07-2000 has been allowed and said Patent Restored.

## OPPOSITION PROCEEDINGS

An opposition entered by the Eastman Chemical Company, USA, to the grant of a Patent to the Application No. 180732 (149/DEL/91) has been dismissed and the application for Patent has been ordered to proceed for sealing.

## CESSATION OF PATENTS

170990 180523 181250 183313 183496 183580

## RENEWAL FEES PAID

184027	184028	177518	171913	177599	177560	182932
177774	180711	178709	181750	169334	169387	177615
178514	183138	183445	169983	171943	176561	175541
179144	182420	182828	168918	169597	175988	177360
184220	183426	183642	176324	183535	181922	179929
179143	174834	183327	181701	183360	179551	183819
183709	183710	183061	184159	184199	184200	172246
178513	177636	183543	171702	179357	176519	181813
176984	184153	175643	177586	178014	181347	181535
182142	179133	181385	181463	175941	182180	183791
184371	177083	181655	178361	177480	180881	179552
179812	172852	176337	171065	182592	172346	181387
169576	174253	177584	180701	181375	181884	184152
182209	182289	178965	175971	176073	183465	172300
172719	171549	184151	184212	184242	184247	175597
178650	173723	171027	171161	173352	173672	175892
176631	179638	179918	179920	183017	176763	179575
179833	173237	169934	177292	179637	171112	182693
184175	184173	184125	184176	184126	184127	184178
184129	184224	184223	184221	184183	184122	184136
184138	184139	184140	184172	180469	184209	183015
183849	180543	180550	180582	180680	179571	183010
180011	179452	179615	170984	184258	180456	183952
184189	184148	184150	184020	184184	184227	183997
184050	184041	184042	184043	184044	184045	184046
184047	184201	184203	184135	184228	184207	184204
184205	184131	184132	184133	174281	171991	183855
184229	179380	175671	172444	182769	174077	181851
181550	179919	173604	183019	183110	183018	171331
179344	179692	173367	173021	180019	183126	181964
183386	181220	180539	173724	173725	180018	170988
171382	169469	170539	179371	173831	179596	181554
175090	183857					

## PATENT SEALED ON 11-05-2001

173019 181669 181865 184572 184851\* 184852 184853  
 184854\* 184855\* 184856 184857 184858\* 184859 184860  
 184861 184862 184865 184866 184867 184868\* 184869  
 184871\* 184872 184874\* 184875 184876 184877\*D  
 184878\*D 184879\*F 184880\*D 184881\* 184882  
 184883\*D 184885\* 184886 184888\* 184889 184890\*

KOL-20, DEL-27, MUM-01, CHEN-NIL

\*Patent shall be deemed to be endorsed with words  
 LICENCE OF RIGHT Under Section 87 of the Patents Act,  
 1970 from the date of expiration of three years from the  
 date of sealing.

D—Drug Patents

F—Food Patents

## REGISTRATION OF DESIGNS

The following designs have been registered. They are  
 not open to inspection for a period of two years from the  
 date of registration except as provided for in section 50 of  
 the Design Act, 1911.

The date shown in the each entries is the date of  
 registration included in the entries.

Class 01. No. 182147. UNIQUE PRODUCTS, 2/C,  
 Bindiya, Bandra Reclamation, Bandra West.  
 Mumbai-400050, Maharashtra, India.  
 "Hook", 19 April 2000.

Class 01. No. 182537. USHA SHRIRAM (INDIA) PROP.  
 Mansarovar Trust of Block "A", DDA  
 Commercial Complex, Ring Road, Naraina,  
 New Delhi-110028, India. "ELECTRIC  
 IRON", 1 June 2000.

Class 03. No. 182107. EAGLE FLASK INDUSTRIES  
 LTD., Eagle Estate, Talegaon-410502,

District : Pune, Maharashtra, India.  
 "FLASK", 13 April 2000.

Class 03. No. 182532. TANEJA MINES PVT. LTD.,  
 Empire Plaza No 102, empire Estate,  
 Mehrauli-Gurgaon Road, Sultanpur New  
 Delhi-110030, India. "PICTURE FRAME",  
 31 May 2000.

Class 03. No. 182647. SUNEHARI EXPORTS LIMITED.  
 B-I/E-23, Mohan Co-Operative Industrial  
 Estate, Mathura, Road, New Delhi-110 044.  
 "TOOTHBRUSH HANDLE", 19 June 2000.

Class 03. No. 182973. HINDUSTAN ELECTRONIC LINE  
 CONTROL SYSTEMS, 42, Mahadev Nagar,  
 Near Gitanjali Cinema, Varachha Road, Surat-  
 395006, Gujarat, India. "TUBE HOLDING  
 BALLAST", 21 July 2000.

Class 10. No. 182146. LIBERTY SHOES LIMITED,  
 Liberty House Extension, Railway Road,  
 Karnal-132001, (Haryana), India. "STRAP",  
 19 April 2000.

Class 10. No. 182153. API POLYMERS (INDIA) LTD.,  
 J-17, Udyog Nagar, New Delhi-110041,  
 India. "SHOE", 20 April 2000.

Class 12. No. 182565. KITPLY INDUSTRIES LIMITED,  
 Rungagora Road, Tinsukia-786 125, Assam,  
 India. "SPORT PLAYING AREA  
 MARKER", 5 June 2000.

Class 12. No. 183462. SAMSONITE CORPORATION,  
 Delaware, U.S.A., 11200 East 45th Avenue,  
 Denver, Colorado-80239, U.S.A., "ATTACHE  
 CASE", 26 May 2000.

H.D. THAKUR  
 Controller General of Patents  
 Designs & Trade Marks

